

# EUROPEAN PATENT OFFICE

## Patent Abstracts of Japan

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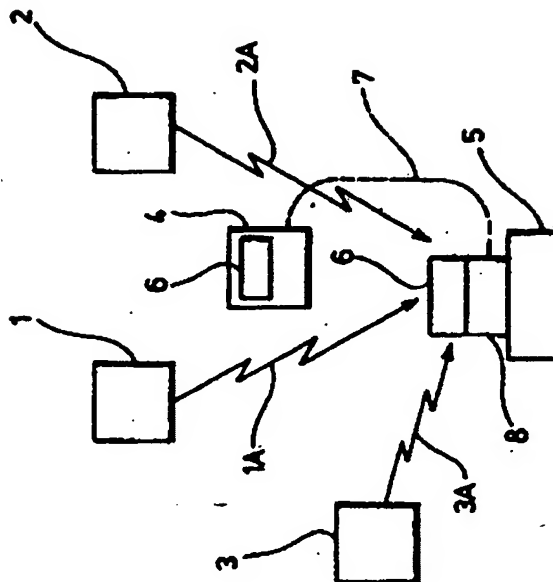
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APPLICANT : JAPAN RADIO CO LTD;

INVENTOR : HAGINO YOSHIZO;

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TITLE : RADIO NAVIGATION DEVICE OF  
HYPERBOLA SYSTEM



**ABSTRACT :** PURPOSE: To perform stable radio navigation of a hyperbola system without installing new private transmitting stations by determining the positions of a moving body in accordance with the time differences of the synchronizing signals of TV broadcasting radio waves from plural TV stations.

**CONSTITUTION:** The broadcasting radio waves from existing television stations 1, 2 of which the positions are fixed are received in a moving body 5, and the time difference between the synchronizing signals of the broadcasting radio waves of steep waveforms are detected, whereby the position line of the body 5 is determined. Similarly, the other position line of the moving body 5 is determined with the broadcasting radio waves from the television stations 1, 3, and the position of the body 5 by the point of intersection of the position lines is determined. On the other hand, the detected value of the time difference between the similar synchronizing signals in a fixed monitoring station 4 where the distances from the stations 1-3 are fixed is transmitted to the body 5, and a required calibration is accomplished. Thus, the stable radio navigation system of a hyperbola system is accomplished without new private transmission systems.

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